

## REMARKS

Claims 1, 13 and 19 have been amended. Claims 1-20 remain for further consideration.

No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

**1-2.** Claims 1-3, 5-10 and 12-20 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent 5,940,398 to Stiegler et al. (hereinafter “Stiegler”), U.S. Patent 4,310,849 to Glass (hereinafter “Glass”), U.S. Patent 5,808,660 to Sekine et al. (hereinafter “Sekine”), U.S. Patent 5,596,647 to Wakai et al. (hereinafter “Wakai”), U.S. Patent 5,121,205 to Ng et al. (hereinafter “Ng”) and U.S. Patent 6,097,435 to Stanger et al. (hereinafter “Stanger”).

### Claim 1

The Official Action recognizes that Stiegler fails to teach certain features of claim 1. (Official Action, pgs. 4-5). The Official Action then contends that “*in an analogous art, Glass teaches a data source for audio and video data (72A-right audio signal, 71A, right video signal, 71B-left video signal, 72B-left audio signal; col. 5, lines 32-48) and a demultiplexer to separate audio and video data (Tuners 83 and 84 convert (demultiplex) the signals received into video and audio signals - col. 5, line 54-col. 6, line 15).*” (Official Action, pg. 5). The Official Action concludes that “*it would have been obvious to one of ordinary skill in the art at the time of applicant’s invention to modify Stiegler’s invention to include the above mentioned limitation, as taught by Glass, such that the receiver could simultaneously receive and demodulate the*

*transmitted right channel and left channel signals, and simultaneously display the video signal and play the audio signal.”* (Official Action, pg. 5).

The Official Action recognizes that the combination of Stiegler and Glass fail to teach certain features of claim 1. (Official Action, pg. 5). The Official Action then contends that “*in an analogous art, Sekine teaches it is desirable to use compressed audio/video (MPEG compression of audio/video) either MPEG1 or MPEG2 for transmission of signals at various definition (bit rates) depending on the type of device connected to the network (col. 6, lines 6-12; col. 4, lines 40-43; figs. 10-11).*” (Official Action, pg. 6). The Official Action concludes that “*it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the system of Stiegler and Glass to include compressed audio/video as taught by Sekine for the added advantages of being in compliance with a well known/commercial standard that enables reduced bit rate playback of a diverse selection of media/media types, e.g., video CDs, DVD standard discs, MP3 audio, etc., and media playback devices.*” (Official Action, pg. 6).

The Official Action recognizes that the combination of Stiegler, Glass and Sekine fail to teach certain features of claim 1. (Official Action, pg. 6). The Official Action then contends that “*in an analogous art, Wakai teaches it is desirable to use an audio buffer for intermediately storing separated audio data before it is transmitted to a ring network so that synchronization within the passenger entertainment system is maintained based on the network transmission rate (fig. 1) (col. 24, lines 23-42).*” (Official Action, pg. 6). The Official Action concludes that “*it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the system of Stiegler and Glass in view of Sekine to include an audio buffer for intermediately storing the separated audio data as taught by Wakai for the well known advantages of improving transmission load efficiency and reducing data read/write/codec errors because buffers enable interconnecting of two digital circuits operating at different rates,*

*holding data for use at a later time, allowing timing corrections to be made on a data stream, and collecting binary data bits into groups that can then be operated on as a unit.”* (Official Action, pgs. 6-7).

The Official Action recognizes that the combination of Stiegler, Glass, Sekine and Wakai fail to teach certain features of claim 1. (Official Action, pg. 7). The Official Action then contends that *“in an analogous art Ng teaches a bit rate converter 514 (fig. 5) to recode a high definition signal 510 (fig. 5) to a standard (lower resolution) MAIN signal, e.g., a NTSC signal shown at 515 (col. 5, lines 13-35; col. 2, lines 21-30). Ng teaches a video buffer 516 (fig. 5) for intermediately storing the separated video data (col. 5, lines 29-32). Ng does this so that when the signal (Y' I' Q') separated from the high definition signal 510 is received as an auxiliary signal by a receiver/decoder it will maintain synchronism with the main signal, e.g., audio or video, transmitted on a network are properly aligned/synchronous when recombined for presentation at the receiver/decoder (col. 2, lines 14-31).”* (Official Action, pg. 7). The Official Action concludes that *“it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the system of Stiegler, Glass, Sekine and Van Steenbrugge to include a bit rate converter to recode, and a video buffer for intermediately storing the separated video data as taught by Ng for the added advantage of minimizing system and receiver cost by transmitting a less bandwidth demanding signal that is compatible with a plurality of commercially available and standard receiver devices.”* (Official Action, pgs. 7-8; where “Van Steenbrugge” mentioned above, while not explicated listed in the Official Action, is taken to mean U.S. Patent 5,485,459, previously submitted by Applicant in an Information Disclosure Statement).

The Official Action contends that *“Stiegler, Glass, Sekine, Wakai, and Ng teach control units connected to the audio (Van Steenbrugge - col. 5, lines 25-35 - control arrangement 416 -*

fig. 4) and video buffers (Ng - 516, 518 -fig. 5; col. 4, lines 9-12; col. 5, lines 29-32 & lines 50-56).” (Official Action, pg. 8). The Official Action recognizes that “Stiegler, Glass, Sekine, Wakai, and Ng fail to teach a control unit which specifies and controls the adjustable intermediate storage time of the buffers.” (Official Action, pg. 8). The Official Action contends that “in an analogous art Stanger teaches it is desirable to use a control unit 80 (fig. 4) which specifies and controls the adjustable intermediate storage time of buffers for controlling bit rate output when distributing compressed a audio/video signal in a limited bandwidth network (col. 4, lines 42-51; col. 3, lines 15-47; col. 7, lines 39-42).” (Official Action, pg. 8). The Official Action concludes that “it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Stiegler, Glass, Sekine, Van Steenbrugge, and Ng to include a control unit which specifies and controls the adjustable intermediate storage time of the buffers as taught by Stanger for the added advantage of reducing the bit rate of the source signal and conserving bandwidth on the data line/ring network (Stanger - col. 1, lines 30-34).” (Official Action, pg. 8). It is respectfully submitted that this rejection is improper for several reasons.

#### **THE CLAIMED INVENTION IS PATENTABLE OVER THE COMBINED REFERENCES**

Claim 1 has been amended to more particularly recite within the body of the claim that “...the bit positions for the audio or video data respectively are collected together in several connected component bit groups”. (cl. 1). In contrast, the combined references teach two separate video signal sources and two separate audio signal sources. Specifically, Glass discloses two separate video data sources 71A, 71B (television cameras; col. 5, lines 33-35; FIG. 2), and two separate audio data sources 72A, 72B (microphones; col. 5, lines 38-41; FIG. 2). Four separate uncompressed data source signals are illustrated in FIG. 2 of Glass: two separate

video signals (one each from the two TV cameras 71A, 71B); and two separate audio signals (one each from the two microphones 72A, 72B). Thus, there are four separate data sources disclosed in Glass each providing an uncompressed data signal. There is no teaching in Glass, or in the combined teachings of Stiegler, Glass, Sekine, Wakai, and Ng, of *“a data source for compressed audio and video data, where the bit positions for the audio or video data respectively are collected together in several connected component bit groups”* (emphasis added, cl. 1). The combination of Stiegler, Glass, Sekine, Wakai, and Ng neither discloses nor suggests a data source that provides compressed audio and video configured and arranged as recited in claim 1.

Further, no valid reason has been identified in the Official Action as to why a person of ordinary skill in the art would have combined Stiegler, Glass, Sekine, Wakai, and Ng to meet the features of claim 1 of *“a data source for compressed audio and video data including a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal.”*<sup>1</sup> As noted above, the Official Action concludes that *“it would have been obvious to one of ordinary skill in the art at the time of applicant’s invention to modify Stiegler’s invention to include the above mentioned limitation, as taught by Glass, such that the receiver could simultaneously receive and demodulate the transmitted right channel and left channel signals, and simultaneously display the video signal and play the audio signal.”* (Official Action, pg. 5). The Official Action contends that Stiegler discloses *“at least one data source (video camera 41 and/or CD player 42, inter alia; col. 2, lines 26-31) being present for audio (CD player 42 provides audio and col. 3, lines 40-45 & col. 6, lines 35-40 ... wherein the at least one*

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<sup>1</sup> See Memorandum, dated May 3, 2007, from Margaret A. Focarino, Deputy Commissioner for Patent Operations, to Technology Center Directors regarding the Supreme Court decision on *KSR Int’l Co., v. Teleflex, Inc.*, where it is emphasized that *“therefore, in formulating a rejection under 35 U.S.C. §103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.”*

*data source comprises: a data source for audio and video data (as discussed above).*” (emphasis in original; Official Action, pg. 4). However, Stiegler or more particularly the combination of Stiegler, Glass, Sekine, Wakai, and Ng fails to disclose a data source for both audio and video data. None of the devices connected in the network 31 of Stiegler (FIG. 3) comprise a data source for both audio and video data. Instead, the video source (video camera 41) in Stiegler is separate from the audio source (CD player 42). The video camera 41 in Stiegler is used within a motor vehicle and as such the camera 41 must be a pure video device since there is no need for a camera in a motor vehicle application that captures both video and audio. A video camera in a motor vehicle is typically used as back-up camera, for example in SUV’s with limited rear visibility. Therefore, Stiegler can not be read as teaching a video camera that provides both video and audio. Thus, it is respectfully submitted that the combined references Stiegler, Glass, Sekine, Wakai, and Ng neither disclose nor suggest the feature of claim 1 of *“a data source for compressed audio and video data, where the bit positions for the audio or video data respectively are collected together in several connected component bit groups”*. As a result, the reason identified in the Official Action to combine Stiegler with Glass (*“such that the receiver could simultaneously receive and demodulate the transmitted right channel and left channel signals, and simultaneously display the video signal and play the audio signal”*) is not a valid reason as to why a person of ordinary skill in the art would have combined Stiegler, Glass, Sekine, Wakai, and Ng to allegedly meet the feature of claim 1 of *“a data source for compressed audio or video data”*. As amended, claim 1 recites *“a data source for compressed audio and video data, where the bit positions for the audio or video data respectively are collected together in several connected component bit groups”* (emphasis added, cl. 1) and the combined prior art references fail to disclose a data source that provides compressed audio and video data as expressly set forth in the claim.

Further, the Official Action concludes that *“it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the system of Stiegler and Glass to include compressed audio/video as taught by Sekine for the added advantages of being in compliance with a well known/commercial standard that enables reduced bit rate playback of a diverse selection of media/media types, e.g., video CDs, DVD standard discs, MP3 audio, etc., and media playback devices.”* (Official Action, pg. 6). However, this alleged motivation to combine Stiegler and Glass with Sekine fails because Glass and Sekine are concerned with very different types of video and audio data, and the *motis operandi* of each system is significantly different. Glass relates to an analog system that captures and transmits uncompressed analog video and audio terrestrially (i.e., via the open air using an antenna). In contrast, Stiegler relates to the transmission of digital data along a closed wireline network in a motor vehicle. Glass is concerned with a stereoscopic video system which *“includes the generation or simulation of two different monoscopic video images corresponding to the different views by a human’s eyes of an original object and two display units for separately displaying the two monoscopic images. The two monoscopic images are flexibly coupled separately and directly from the display units to the eyes of a user by a headset.”* (Abstract). Two earphones are also included on the headset to receive the audio signals which are generated by the *“microphones 72A, 72B which are disposed a given distance apart to provide a stereophonic recording or any sound emanating from the filmed subject.”* (col. 5, lines 38-41; see also col. 5, lines 64-66). That is, the system in Glass generates its own video images and audio sounds for playback to a user wearing the headset. Sekine, on the other hand, is directed to a video on-demand system for use in, e.g., aircraft. Sekine discloses the use of video programs in two picture qualities – one for an ordinary image (MPEG1 format image) and a high definition image (MPEG2 format image), typically commercially-recorded movies and other programs, for

playback to passengers on the aircraft. (col. 6, lines 6-12). Thus, Sekine merely discloses that video data can be provided in a compressed format. There is no disclosure or suggestion in Glass that the video or audio data utilized in Glass is compressed or needs to be compressed. This is likely because Glass is not using recorded programs; instead it is using video and audio data recorded by cameras and microphones for playback to the headset wearer. Thus, the combination of Stiegler, Glass and Sekine fails to meet the features of claim 1 of “*a data source for compressed audio and video data including a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal.*” As a result, the reason identified in the Official Action to combine Stiegler, Glass and Sekine (“*for the added advantages of being in compliance with a well known/commercial standard that enables reduced bit rate playback of a diverse selection of media/media types, e.g., video CDs, DVD standard discs, MP3 audio, etc., and media playback devices*”) is not a valid reason as to why a person of ordinary skill in the art would have combined Stiegler, Glass and Sekine to meet the feature of claim 1 of “*a data source for compressed audio and video data including a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal*”. Accordingly, given the substantial technical dissimilarities, it is respectfully submitted that skilled person would not have combined the digital system of Stiegler with the analog system of Glass further in combination with the Sekine et al.

Finally, Stiegler also fails to disclose the claimed feature of “*a demultiplexer to separate the compressed audio and video data contained in one compressed signal.*” Specifically, Applicant respectfully disagrees with the judicial notice taken by the Examiner that Stiegler inherently teaches a demultiplexer, in particular for the stated reason of “*in order for the system to separate the data into left and right channels or to separate ‘channels of any kind’, e.g., to separate a stereo audio CD into left and right channels as disclosed in col. 6, lines 33-41 and*



col. 3, lines 8-11 & lines 33-39)." (Official Action pg. 3). As recited in claim 1, the demultiplexer separates *"the compressed audio and compressed video data contained in one compressed signal."* That is, separation of two different types of compressed data occurs. The stated reasons in the Official Action used to justify the judicial notice taken of the inherency of a demultiplexer in Stiegler do not relate at all to the language of claim 1. Those reasons relate to separating data of only one type, in this case, stereo audio data, into two different channels. This is vastly different than the claim language noted above where compressed audio and video data are separated. As a result, it is respectfully submitted that the judicial notice taken in the Official Action is improper.

In light of the foregoing, the tenuous six reference obviousness rejection of claim 1 cannot be sustained because the combined teachings fail to disclose certain features of claim 1 and the Official Action's contention of judicial notice of certain ones of these undisclosed features in the prior art is improper.

Therefore, it is respectfully submitted that the obviousness rejection of claim 1 is now moot, and that claim 1 is in condition for allowance and should be passed to issuance.

### **Claim 13**

Claim 13 currently stands rejected for the same reasons as claim 1. The arguments set forth above with respect to the patentability of claim 1 apply to claim 13. Thus, it is respectfully submitted that the obviousness rejection of claim 13 is now moot and that claim 13 is in condition for allowance and should be passed to issuance.

**Claim 19**

Claim 19 currently stands rejected for the same reasons as claim 1. The arguments set forth above with respect to the patentability of claim 1 apply to claim 19. Thus, it is respectfully submitted that the obviousness rejection of claim 19 is now moot and that claim 19 is in condition for allowance and should be passed to issuance.

3. Claim 4 currently stands rejected for allegedly being obvious in view of Stiegler, Glass, Sekine, Wakai, Ng, Stanger and U.S. Published Application 2001/0014207 to Kawamura (hereinafter “Kawamura”).

It is respectfully submitted that the rejection of this claim is now moot, since claim 4 depends indirectly from claim 1, which is patentable for at least the reasons discussed above.

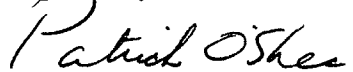
4. Claim 11 currently stands rejected for allegedly being obvious in view of Stiegler, Glass, Sekine, Wakai, Ng, Stanger and U.S. Patent 5,898,695 to Fujii (hereinafter “Fujii”).

It is respectfully submitted that the rejection of this claim is now moot, since claim 11 depends from claim 1, which is patentable for at least the reasons discussed above.

For all the foregoing reasons, reconsideration and allowance of claims 1-20 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "Patrick O'Shea". The signature is written in dark ink and is positioned above a horizontal line.

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